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EXAMINER

MAHMOOD, REZWANUL

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GEREMY A. HEITZ III, ADAM BERENZWEIG,
JASON E. WESTON, RON J. WEISS, SALLY A. GOLDMAN,
THOMAS WALTERS, SAMY BENGIO, DOUGLAS ECK,
JAY M. PONTE, and RYAN M. RIFKIN

Appeal 2016-001237
Application 13/103,445¹
Technology Center 2100

Before KRISTEN L. DROESCH, JOHNNY A. KUMAR, and
KAMRAN JIVANI, *Administrative Patent Judges*.

DROESCH, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek review under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–5, 7–12, and 14–21, all of the pending claims in the application.² We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellants indicate the real party-in-interest is Google Inc. App. Br. 1.

² Claims 6 and 13 have been cancelled.

BACKGROUND

The disclosed invention relates to a system and method for generating a playlist from a library of audio tracks. Spec. ¶ 3, 24.

CLAIMED SUBJECT MATTER

Representative claim 1, reproduced from the Claims Appendix of the Appeal Brief, reads as follows (disputed limitations in *italics*):

1. A method of generating a playlist, comprising:
designating a seed track in an audio library, the audio library comprising audio tracks, each of the audio tracks, including the seed track, being represented by a construct, each construct being derived from a frequency representation of a corresponding audio track and each construct represented by a vector wherein the frequency representation includes at least one of a stabilized auditory image and a mel-frequency cepstral coefficient;
identifying audio tracks in the audio library having corresponding constructs that are within a range of a corresponding construct of the seed track, wherein the corresponding constructs within the range are similar to the corresponding construct of the seed track;
generating the playlist using at least some of the identified audio tracks; and
determining the constructs, wherein determining a construct for an audio track comprises:
obtaining metadata tags for the audio track, the metadata tags relating to one or more attributes of the audio track;
generating the frequency representation for the audio track;
generating the construct using both the metadata tags and the frequency representation; and
ordering tracks in the playlist in accordance with a randomized decreasing-similarity preference function.

REFERENCES AND REJECTIONS ON APPEAL

Claims 17–21 stand rejected under 35 U.S.C. § 112, second paragraph as indefinite.

Claims 1, 7, 9, 10, 12, 14–17, and 19–21 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Theimer et al. (US 2011/0118859 A1; May 19, 2011) (“Theimer”), Asikainen et al. (US 2011/0238698 A1; Sept. 29, 2011) (“Asikainen”), and Wells et al. (US 8,326,584 B1; Dec. 4, 2012) (“Wells”).

Claims 2–5, 11, and 18 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Theimer, Asikainen, Wells, and Weare (US 2011/0087665 A1; Apr. 14, 2011).

Claim 8 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Theimer, Asikainen, Wells, and Slaney et al. (US 2008/0104111 A1; May 1, 2008) (“Slaney”).

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellants’ arguments in the Appeal Brief, the Examiner’s Answer, and Appellants’ arguments in the Reply Brief presented in response to the Answer. Appellants’ arguments are not persuasive of Examiner error. We agree with, and adopt as our own, the Examiner’s factual findings and conclusions of law. We highlight and address specific findings and arguments below for emphasis.

Rejection under 35 U.S.C. § 112, second paragraph

The Examiner rejected claims 17–21 under 35 U.S.C. § 112, second paragraph as indefinite on the basis that claims 17, and 19–21 lack antecedent basis for “the seed track.” *See* Final Act. 7–8. Appellants do not

present arguments addressing this rejection. *See* App. Br. 8–18. Under our procedural rules, an appeal is presumed to be taken from the rejection of all of the claims under rejection unless cancelled by an entered amendment. *See* 37 C.F.R. § 41.31(c). Therefore, we sustain *pro forma* the rejection of claims 17–21 under 35 U.S.C. § 112, second paragraph as indefinite because Appellants do not address this rejection.

Rejections under 35 U.S.C. § 103

Claims 1–4, 7–10, and 14–21

In addressing the rejection of independent claims 1, 14, and 15, Appellants reproduce and characterize selected disclosures of Theimer cited in the rejection, and argue that in Theimer “there is no suggestion that any construct is derived from any frequency representation” as recited in the claims. App. Br. 11–12 (citing Theimer ¶¶ 12, 14, 23, 47, Abstract). Appellants further contend that “Theimer does not teach, disclose, or suggest, ‘designating a seed track in an audio library,’ where ‘each of the audio tracks, including the seed track’ are ‘represented by a construct,’ where each construct is ‘derived’ from a ‘frequency representation of a corresponding audio track’ and where ‘each construct’ is ‘represented by a vector.’” *Id.* at 12.

Appellants’ arguments are not persuasive because they do not address sufficiently the Examiner’s findings that Theimer’s disclosure of an audio dose teaches the claimed “construct” derived from a frequency representation of a corresponding audio track, and that Theimer’s disclosure of a media track already consumed in tracks available in a media player teaches the claimed “seed track.” *See* Final Act. 7 (citing Theimer ¶¶ 12, 14, 23, 47, Figs. 3–4). Appellants acknowledge the aforementioned findings by

the Examiner, but merely reiterate their argument that “Theimer does not teach, disclose, or suggest, ‘designating a seed track in an audio library,’ where ‘each of the audio tracks, including the seed track’ are ‘represented by a construct,’ where each construct is ‘derived from a frequency representation of a corresponding audio track’ and where ‘each construct’ is ‘represented by a vector.’” App. Br. 12.

Appellants further contend that the relied upon teachings of Theimer “do not disclose the use of a “vector” at all, much less one that represents a ‘construct ... derived from a frequency representation’ of an audio track.” App. Br. 12. Appellants also argue that “Asikainen does not teach, disclose, or suggest, among other things, that the fingerprint or any other ‘construct’ is ‘derived from a frequency representation of a corresponding audio track’ and each construct is ‘represented by a vector.’” *Id.* at 11; *see* Reply Br. 6.

Appellants’ arguments are not persuasive because the arguments address the teachings of Theimer alone and the teachings of Asikainen alone, instead of addressing the teachings of Theimer and Asikainen as combined by the Examiner. The Examiner relied on Theimer for teaching “designating a seed track in an audio library, the audio library comprising audio tracks, each of the audio tracks, including the seed track, being represented by a construct, each construct being derived from a frequency representation of a corresponding audio track” in combination with Asikainen’s teaching of “each construct represented by a vector.” *See* Final Act. 7 (citing Theimer ¶¶ 12, 14, 23, 47, Figs. 3–4), 9–10 (citing Asikainen ¶¶ 27, 31, 47–51). One cannot show non-obviousness by analyzing a reference individually, as Appellants have done here, where the rejection is

based on a combination of references. *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

Similar to the previous arguments, Appellants contend that “Wells does not disclose ‘designating a seed track in an audio library,’ where ‘each of the audio tracks, including the seed track’ are ‘represented by a construct,’ where each construct is ‘derived from a frequency representation of a corresponding audio track’ and where ‘each construct’ is ‘represented by a vector.’” App. Br. 12–13. Appellants’ arguments are misplaced because, as highlighted above, the Examiner relies on the combined teachings of Theimer and Asikainen to teach the disputed limitations.

We also are not persuaded by Appellants’ unsupported and conclusory argument that “[o]ne of ordinary skill in the art at the time of the invention would not combine Theimer and Asikainen to obtain the feature of ‘designating a seed track in an audio library, the audio library comprising audio tracks, each of the audio tracks, including the seed track, being represented by a construct, each construct being derived from a frequency representation of a corresponding audio track and each construct represented by a vector...’ as recited in independent claim 1, and as similarly recited in independent claims 14 and 15.” App. Br. 10. Argument of counsel cannot take the place of evidence lacking in the record. *Meitzner v. Mindick*, 549 F.2d 775, 782 (CCPA 1977); *see In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974).

In the Reply Brief, Appellants reproduce and characterize selected disclosures of Theimer cited in the Final Rejection and Answer, and argue specifically that “Theimer does not disclose ‘designating a seed track in an audio library,’” and “Theimer does not disclose ‘designating a seed track in

an audio library,’ where ‘each of the audio tracks including the seed track’ are ‘represented by a construct,’ where each construct is ‘represented by a vector.’” Reply Br. 4–5 (citing *Theimer* ¶¶ 12, 14, 23, 47). Appellants also reproduce and characterize selected disclosures of Asikainen cited in the Final Rejection and Answer, and argue that Asikainen “does not disclose ‘designating a seed track in an audio library,’ where ‘each of the audio tracks including the seed track’ are ‘represented by a construct,’ where each construct is ‘represented by a vector.’” *Id.* at 5–6 (citing Asikainen ¶¶ 27, 31, 47). Appellants’ arguments are not responsive to findings, evidence, or conclusions of law raised for the first time in the Answer. *Compare* Ans. 3–12 *with*, Final Act. 7–12, 14–24. Arguments raised for the first time in the Reply Brief are deemed waived and will not be considered by the Board without a showing of good cause. *See* 37 C.F.R. § 41.41(b)(2) (2012); *see also Ex parte Borden*, 93 USPQ2d 1473, 1474 (BPAI 2010) (informative) (“[T]he reply brief [is not] an opportunity to make arguments that could have been made in the principal brief on appeal to rebut the Examiner’s rejections, but were not.”). Appellants do not provide good cause for consideration of Appellants’ belated arguments. *See* Reply Br. 4–8.

In addressing the rejection of independent claims 16, 17, and 19–21, Appellants reproduce and characterize selected disclosures of Asikainen cited in the Examiner’s rejection, and argue that in Asikainen a feature vector is generated for content, and, therefore, there is no suggestion that any construct is derived from any frequency representation. *See* App. Br. 14–15 (citing Asikainen ¶¶ 47–51). Appellants contend that “Asikainen does not disclose that ‘each of the audio tracks, including the seed track’ is ‘represented by a construct,’ where each construct is ‘derived from’ a

frequency representation of a corresponding audio track.” *Id.* at 14.

Appellants’ arguments are not persuasive for the same reasons discussed above, because the arguments address the teachings of Asikainen alone, instead of addressing the teachings of Theimer and Asikainen as combined by the Examiner.

In the Reply Brief, Appellants reproduce and characterize selected disclosures of Theimer cited in the Final Rejection and Answer, and argue that “Theimer does not disclose ‘designating a seed track in an audio library,’ where the ‘audio library’ includes ‘audio tracks,’ with ‘each of the audio tracks including the seed track’ is a ‘represented by a construct,’ with ‘each construct being derived from a frequency representation of a corresponding audio track.” Reply Br. 7 (citing Theimer ¶¶ 12, 14, 23, 47). Appellants’ arguments in the Reply Brief are not responsive to findings, evidence, or conclusions of law raised for the first time in the Answer. *Compare* Ans. 3–12 *with*, Final Act. 24–47. Arguments raised for the first time in the Reply Brief are deemed waived and will not be considered by the Board without a showing of good cause. *See* 37 C.F.R. § 41.41(b)(2) (2012); *Borden*. Appellants do not provide good cause for consideration of Appellants’ belated arguments. *See* Reply Br. 4–8.

For all of these reasons, we are not persuaded of error in the rejection of independent claims 1, 14–17, and 19–21 as unpatentable over Theimer, Asikainen, and Wells. Appellants do not present separate substantive arguments addressing dependent claims 2–4, 7–10, and 18. *See* App. Br. 14–18. Accordingly for the same reason as claims 1, 14–17, and 19–21, we are not persuaded of error in the rejection of dependent claims 2–4, 7–10, and 18.

Claims 5 and 11

Appellants present separate arguments addressing dependent claims 5 and 11. *See* App. Br. 16. Appellants reproduce selected portions of paragraphs 23 and 25 of Theimer, cited in the Final Rejection, and present Appellants' characterization of the selected disclosures. App. Br. 16–17 (citing Theimer ¶¶ 23–27, 47, 71). Appellants contend that “Theimer does not teach, disclose, or suggest that each ‘audio track’ is ‘represented’ by a ‘construct’ that is ‘derived from attributes of [a] corresponding audio track,’ and a ‘seed track’ is ‘represented’ by a ‘corresponding ... construct derived from an attribute associated with the seed track.’” *Id.* at 16; *see id.* at 17.

Appellants' arguments are not persuasive because they do not address meaningfully the Examiner's finding that Theimer teaches generating a playlist based on constraints which can be audio dose within different frequency ranges and/or genre, and/or author, and selecting a number of audio tracks from a database to form a playlist based on the constraints. *See* Final Act. 49 (citing Theimer ¶¶ 23–27, 47, 71). We agree with, and adopt as our own, the Examiner's additional detailed findings that Theimer discloses: (1) determining an audio dose for a particular track in a first frequency range (citing Theimer ¶ 12); (2) determining audio dose within a first and second frequency range of media tracks available on the media player (citing Theimer ¶ 23); (3) selecting media tracks in a collection of stored media tracks based on constraints such as genre, author name, or other preferences, which are attributes, and audio dose within different frequency ranges (citing Theimer ¶ 47); and (4) selecting a number of audio tracks from a database to form a playlist based on similarity by taking audio dose and other criteria such as genre or author into consideration (citing

Theimer ¶ 71). *See* Ans. 11. We also agree with, and adopt as our own, the Examiner’s additional explanation that “[t]he constraints for selecting each track can be based on an audio dose within first or second frequency range and other audio attributes of the track, which is representing audio tracks by a first constraint derived from a first frequency range and other attributes of the tracks and/or representing audio tracks by a second constraint derived from second frequency range and other attributes of the tracks.” *See id.*

Appellants also argue that “Weare does not disclose that each ‘audio track’ is ‘represented’ by a ‘construct’ that is ‘derived from attributes of [a] corresponding audio track,’ and a ‘seed track’ is ‘represented’ by a ‘corresponding ... construct derived from an attribute associated with the seed track.’” App. Br. 17. Appellants’ arguments are misplaced and not persuasive because the Examiner relies on Theimer for teaching the disputed limitations. *See* Final Act. 49–50.

For these reasons, in addition to the reasons addressing claim 1 above, Appellants do not persuade us of error in the rejection of dependent claims 5 and 11 as unpatentable over Theimer, Asikainen, Wells, and Weare.

DECISION

We AFFIRM the rejections of claims 1–5, 7–12, and 14–21.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED